April 2005

Gallatin County Extension Report

Gallatin Ag Report

2005 Gallatin Beef Producer Tour, June 15

The Gallatin Beef Producers will be holding their annual tour on Wednesday, June 15. The tour is set to begin at the Pass Creek Community Center; the busses will leave at 9 am. Lunch will be provided. The tour will include a trip down Sixteenmile Canyon as well as a stop for a GIS mapping session. The tour will return to Pass Creek at 6 pm where there will be a steak barbeque at the Community Center.

Cost of the tour is $15 (including lunch). The cost of the steak dinner will be an additional $7.00. Payment may be made at the time of the tour or to the Extension office when you call to RSVP. Make checks payable to Gallatin Beef Producers. This tour is sponsored by Gallatin Beef Producers, co-sponsored by Gallatin Valley Ag Lenders, Gallatin County Weed Department, and Gallatin County Extension Service.

Please RSVP to Gallatin County Extension Office at 582-3280 by June 10th.

Sixteenmile Creek.

Industry Market Issues, *Understanding the Industry's Challenges*

The 2005 Montana Livestock Forum and Nutrition Conference will be held April 19-20 at the GranTree Inn in Bozeman. This year the Forum will focus on marketing issues that are impacting the beef cattle industry in the United States. Dynamic speakers will present the latest information on trade, identification, and traceability. The Forum will also address current nutritional challenges for the livestock industry in Montana, such as drought, water quality and mineral nutrition.

Call 800-624-5865 or 406-587-5261 for reservations at the GranTree Inn. For more information contact Anita Gray at 994-3414 or email anitag@montana.edu

Other Offerings:

- ARPAS Professional Animal Scientist Exam, Tuesday, April 19, 2005, 8:30 am, $25
- PAS Continuing Education Credits, approved by ARPAS for 5 CEU credits
- MSU Collegiate Cattlewomen Free Annual Educational Forum, Tuesday, April 19, 2005, 10:00 am, *Ranching through the Generations, Ron Hanson, Dept of Ag Economics, University of Nebraska*

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Important Dates:

- ***April 19-20*** *MT Livestock Forum and Nutrition Conference*
- ***June 10*** *RSVP for Beef Producer Tour*
- ***June 15*** *Beef Producer Tour*
- ***June 19-24*** *4-H Camp*
- ***July 21-24*** *County Fair*
- ***October 27-28*** *Beef Cattle Reproduction Symposium*

Waste Pesticide Collection Program

What are waste pesticides?
Any pesticide (insecticide, herbicide, fungicide, etc.) that becomes unusable as originally intended is waste. Pesticides become unusable when they have exceeded their shelf life, if they were cancelled by the US EPA, if they are no longer registered for use in Montana, or they are unknown because labels were lost or unreadable. The program also accepts empty metal containers for recycling or as waste.

Why should I bring in my waste pesticides?
A pesticide that can no longer be used must be disposed in a way that protects human health and the environment. The longer a pesticide is held in storage the greater the risk of spillage that will cause injury to people or contamination of the environment. Old pesticides, neglected or in poor storage, may be exposed to children, livestock and pets causing serious injury or death. Containers may corrode causing leaks. Fire or flooding may cause pesticide releases that can contaminate the soils and groundwater leading to costly cleanup. To protect your family, pets, livestock and drinking water you are encouraged to participate in this environmentally responsible program.

How do I participate?
- Complete a Montana Department of Agriculture Pesticide Disposal pre-registration form. The **registration deadline is June 14, 2005**.
- REGISTRATION FORM: http://agr.state.mt.us/pestfert/miscpdf/DisposalRegistrationForm.pdf
- Once pre-registered, you will be notified of the location and the date of collection.
- The actual drop-off takes less than 30 minutes.

How much will this cost me?
A fee is charged to participate but at a rate usually less than for an individual using a waste disposal firm. Cost is based on weight of the waste pesticide and its container.

- Minimum charge for disposal is $5.00
- $1.00 per pound for amounts of 200 pounds or less
- $0.50 per pound for additional amounts over 200 pounds
- The Department may elect to accept pesticides in pressurized cylinders or that contain dioxin or heavy metals into the program at a higher fee.

For example, the cost to an individual:
Using *MDA* program:
5 gals X 10 lbs./gal X $1.00 per lb. = $50.00
Using a *private disposal company* = $100-$500

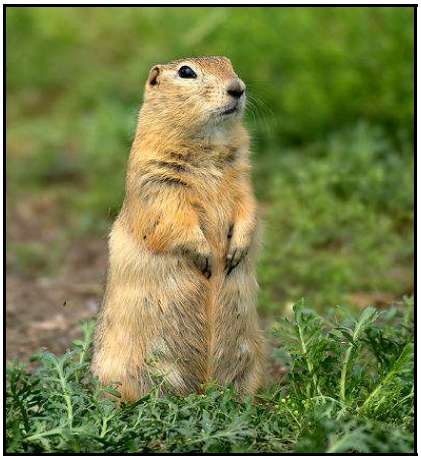
Licensed pesticide applicators will receive a monetary credit when they participate in the disposal program. The credit will be equal to the portion of licensing fee supporting the disposal program.

For more information or registration forms,
Contact: **Kyle Wasson**

Montana Department of Agriculture
Pesticide Disposal Program
P.O. Box 200201
Helena, MT 59620-0201

Phone: **(406) 444-5400**
Fax: **(406) 444-7336**
Website: **http://agr.state.mt.us/pestfert/disposal.asp**
Email: **agr@mt.gov**

For information concerning safe transportation of the pesticides to the drop off areas, please visit **http://agr.state.mt.us/pestfert/miscpdf/DisposalTransportTips.pdf** *or contact Kyle Wasson at the Montana Department of Agriculture (see the above box for contact information).*



Richardson Ground Squirrel. Notice that this rodent is found ABOVE ground.

Richardson Ground Squirrels

The Richardson ground squirrel (*Spermophilius richardsonii*) is a medium-sized ground squirrel of rather uniform coloration. It is buffy yellow to grayish in color. The tail is about one-fourth the total body length and is blackish to buff with whitish hairs on the outer edges and end. Adults are 7-9 inches long and weigh 11-18 ounces.

Richardson ground squirrels emerge from hibernation in February to April, depending largely on elevation and local weather conditions. Males emerge first and establish breeding territories. Females begin emergence from hibernation about two weeks later. The breeding period is short and synchronous in a local area but may extend over several weeks from one part of a squirrels' range to another. The young are usually born in April and May after a 24 day gestation period. Only one litter averaging 6 to 7 young is born per female each year. The young become active above ground about 4 weeks after birth. By the end of the summer juveniles are nearly adult size.

Ground squirrels are primarily herbivores and consume a wide variety of grasses and forbs. Green, succulent vegetation is preferred forage probably because free water is not generally available in habitats occupied by squirrels. Because of their high fat content, seeds of plants and domestic crops are an important dietary supplement. Squirrels will occasionally feed on insects and carrion.

As vegetation dries during mid to late summer many ground squirrels enter hibernation. Some portions of the adult population may begin hibernation in late July although the majority wait until August. Young of the year and some adults continue activity into September and October. During a mild autumn some activity into may occur even into November.

The Richardson ground squirrel is one of the most economically important rodent species in Montana because of its widespread distribution in the state and its ability to damage a wide variety of agricultural crops. Ground squirrels damage grain crops by consuming and trampling the plants. Damage most often occurs when squirrels reside in uncultivated border areas and enter the crop edges to feed on the grain plants. Forage crops, like alfalfa, pasturelands and rangelands are often inhabited by ground squirrels. Squirrel feeding and mounds covering the crop reduces production and available livestock forage. Squirrel mounds can cause costly equipment damage to machinery used to harvest forage crops. Mound and burrow openings present a potential hazard to livestock. Burrowing activity may contribute to increased soil erosion and provide sites for undesirable weedy plants to grow.

Richardson Ground Squirrels vs. Pocket Gophers

The pocket gopher, a common, yet seldom seen burrowing rodent, is often mistakenly called a mole. Moles, which have similar burrowing habits, are insectivores feeding on earthworms and insect larvae and do not occur in Montana. Other animals such as the Richardson ground squirrel are commonly called gophers. This confusion in terminology sometimes results in misidentification of a pest rodent problem and use of incorrect control methods.

Northern Pocket Gopher (Thomomys talpoides)

Pocket gophers and ground squirrels are quite different in behavior, diets and burrow construction. Simply by observing the burrow mounds of pocket gophers and ground squirrels, the occupant can be identified. The burrow openings to ground squirrels are always open (see picture on facing page). In contrast, the pocket gopher burrow is plugged with soil.

Control of Richardson Ground Squirrels

When cost versus benefit justifies a control program for Richardson ground squirrels, several control methods may be considered. The control method you select should be both safe and effective. Because of the reproductive capability of ground squirrels, it is necessary to reduce their numbers by 90% or greater for long term control. If reduction is much less than 90%, a ground squirrel population may return to or exceed its original level within one or two reproductive seasons.

Ground squirrel burrow openings are unobstructed holes.

"Uses of strychnine baits for ground squirrel and prairie dog control is an illegal and unregistered use."

There are many methods for controlling ground squirrels; cultural and biological controls, shooting, trapping, burrow fumigants, bait stations and grain baits just to name a few. But remember: the use of strychnine baits for ground squirrel and prairie dog control is an illegal and unregistered use.

This article will concentrate on bait stations, specifically PVC bait stations.

Bait Stations

Bait stations are devices containing a rodenticide bait from which ground squirrels feed. Bait stations are constructed to prevent animals larger than ground squirrels from entering. Other design characteristics include weather-tightness and sufficient bait capacity so that frequent refill is not required.

Anticoagulant baits are the only rodenticides registered for use in bait stations. Anticoagulants inhibit the ability of the blood to clot and cause death primarily from internal bleeding. These are *multidose* anticoagulants and most require repeat feedings over several days to be effective. Studies by the Montana Department of Agriculture have shown bait stations are used by ground squirrels and that the anticoagulant baits tested are effective.

Department studies indicate bait station design seems to have little influence on their use by squirrels providing adequate access is allowed. From the applicators view there are several design characteristics that are important. In addition to providing adequate access for the squirrels, a convenient access for replenishing the bait is needed. The station should be weather-tight to prevent bait spoilage. Moldy bait is poorly accepted, resulting in less effective control and disposing of unused, spoiled bait is costly. The station must hold a sufficient quantity of bait so the station need only be maintained once or twice a week. The stations need to be secured to the ground to prevent the station from tipping over and bait spillage by squirrels, livestock or other animals and wind.

Instructions continued on the next page.↗

Montana Sheep Directory

The Montana Department of Agriculture and the Montana Wool Growers Association have announced that they will be updating the Montana Sheep Directory. The intent of the Montana Sheep Directory is to provide potential buyers with an all-breed directory of Montana's sheep and a reference to related service providers, including breed associations, wool and lamb buyers and sheep shearers. To assist Montana producers in expanding existing markets and reaching new markets, the Montana Sheep Directory is distributed at trade shows, fairs, stock shows and other promotional events throughout the United States and other countries.

Interested parties can contact Marty Earnheart for an inclusion form. All individuals must fill out and sign an inclusion form, regardless of their listing in previous directories. Completed forms must be returned to the Montana Department of Agriculture, Agricultural Development Division, PO Box 200201, Helena, MT 59620-0201 or fax them to (406) 444-9442. If there are any questions, please contact the Montana Department of Agriculture at (406) 444-2402 or email mearnheart@mt.gov.

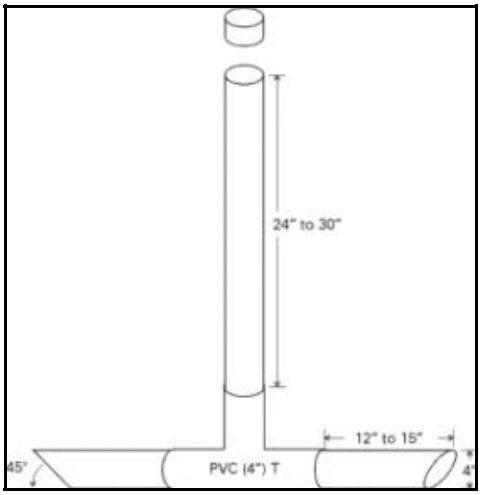
Control of Richardson Ground Squirrels, Bait Stations Cont'd

Commercially-made bait stations are available in many different designs and are available at most farm supply, hardware or horticulture retailers. Or you can make your own using PVC tubing.

PVC Inverted-T Anticoagulant Bait Station

(Alberta Agri-Facts, 9/2000, Agdex 684-2)

1. Make the bait station from PVC pipe no smaller than 4" in diameter for ground squirrels.
2. The long, upright end, 24" to 30" of the "T" is a bait reservoir. Keep this end upright by attaching it to a fence post, building, tree, Re-bar stake, etc. After filling with bait, place a plastic cap on the end to keep moisture from spoiling the bait.
3. Keep bait in the station at all times during the program. Each should contain about 500 g (1 lb.) of bait. Bait stations should be checked daily to maintain an uninterrupted supply of bait for a few weeks or until feeding ceases. One bait station will expose ground squirrels 50 to 100m away from the bait.



PVC inverted-T anticoagulant bait station

For further information pertaining to Richardson ground squirrels, bait stations or any other control methods or rodents, please contact the Gallatin Extension Service at 582-3280 or email gallatin2@montana.edu.

Beef Cattle Reproduction Symposium

New methods and technologies to control and improve reproductive success in beef cattle are the focus of the Applied Reproductive Strategies in Beef Cattle October 27 and 28, 2005 at the El Dorado Casino Hotel in Reno, Nevada.

The symposium is designed to
- improve the understanding of the physiological processes of the estrous cycle, currently available procedures to synchronize estrus and ovulation and the proper application of these systems.
- improve the understanding of methods to assess bull fertility and how it affects the success of AI programs.

Topics featured in the symposium include
- Estrous synchronization systems and costs
- Measuring breeding soundness
- Improving conception rates
- Nutrition and reproductive interactions
- Early pregnancy diagnosis
- Panel discussions with producers and veterinarians
- Industry displays and booths,
- Instruction on ultrasound, reproductive tract scoring, and semen quality assessment techniques
- Continuing education credits available

More information about Applied Reproductive Strategies in Beef Cattle, including schedule, registration and lodging information, is available on the Internet at http://westcentral.unl.edu/beefrepro/ or by contacting Ron Torell with the University of Nevada Cooperative Extension at (775) 738-1721 or torellr@unce.unr.edu.

Registration for both days, which includes lunch and proceedings, is $200. Registration discounts of $50 will be given to participants staying at the El Dorado Casino Hotel. Registrations with checks payable to the University of Nevada-Reno Board of Regents can be sent to Ron Torell at 701 Walnut, Elko, Nevada 89801.

MNWSFF

Noxious weeds can reduce grazing capacities for livestock by 65% to 90% of original productivity. Anyone who has purchased hay contaminated with noxious weeds is well aware of the costs associated with weed control on feeding sites and in fields. The best method of weed control is taking preventative measures to reduce their spread. One way to do this is through the use of forage that has been certified "noxious weed seed free" by an agent/inspector who was trained by the Montana Department of Agriculture.

The Montana Noxious Weed Seed Free Forage Program was established in 1995 as a result of legislative action authorizing the Montana Department of Agriculture to implement a plan of action to control expanding noxious weed infestation.

The economic and ecological impact of noxious weeds is damaging to Montana. Noxious weeds displace native plant species, reduce biological diversity, increase soil erosion and decrease wildlife habitat and recreational land value.

In restricted areas, certified forage is required on public, state and federal land. It is also a good idea to use it on private land to prevent introduction of new noxious weeds.

What is the certification process? Before harvest, a certified inspector will make a visual inspection of the forage. If it meets the standards of the Montana Noxious Weed Seed Free Forage (NWSFF) Program, the forage is certified and marked as noxious weed seed free. After the forage is inspected and certified, it will be identified by either a red identification tag or special two colored blue and orange twine.

If you or someone you know would be interested in becoming a MNWSFF producer, contact the Extension office at 582-3280 or email gallatin2@montana.edu.

COOPERATIVE EXTENSION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

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